

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**Datasheet for the decision  
of 27 January 2009**

**Case Number:** T 1337/06 - 3.2.05

**Application Number:** 96904514.5

**Publication Number:** 0824494

**IPC:** B65H 19/00

**Language of the proceedings:** EN

**Title of invention:**

Dispensing system with keyed guide slot for sheet rolls

**Patentee:**

GEORGIA-PACIFIC CORPORATION

**Opponent:**

Hagleitner Hygiene International GmbH

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 56,84, 123(2)

**Relevant legal provisions (EPC 1973):**

-

**Keyword:**

"Extension beyond the contents of the application as filed -  
no"

"Clarity - yes"

"Inventive step - no"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 1337/06 - 3.2.05

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.05  
of 27 January 2009

**Appellant:** Hagleitner Hygiene International GmbH  
(Opponent) Lunastraße 5  
A-5700 Zell am See (AT)

**Representative:** Torggler, Paul Norbert  
Patentanwälte Torggler & Hofinger  
Wilhelm-Greil-Straße 16  
Postfach 556  
A-6021 Innsbruck (AT)

**Respondent:** GEORGIA-PACIFIC CORPORATION  
(Patent Proprietor) 133 Peachtree Street, N.E.  
Atlanta  
Georgia 30348 (US)

**Representative:** Pratt, David Martin  
Withers & Rogers LLP  
Goldings House  
2 Haye Lane  
London SE1 2HW (GB)

**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 11 April 2006  
rejecting the opposition filed against European  
patent No. 0824494 pursuant to  
Article 102(2) EPC 1973.

**Composition of the Board:**

**Chairman:** W. Zellhuber  
**Members:** H. Schram  
C. Rennie-Smith

## Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the Opposition Division posted on 11 April 2006 rejecting its opposition against European patent No. 0 824 494, based on Article 100(a) EPC (lack of novelty, Article 54 EPC, lack of inventive step, Article 56 EPC).

II. Oral proceedings were held before the Board of Appeal on 27 January 2009.

III. The appellant requested that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained on the basis of either claims 1 to 12 filed as Main Request or claims 1 to 11 filed as first Auxiliary Request on 23 December 2008.

IV. Claims 1 and 6 of the main request read as follows:

"1. A sheet material roll (112) for use in a rolled product dispenser (100) having opposing guide tracks (110, 111) and a guide projection (124) in one of the guide tracks, the guide projection being positioned at the entrance of that guide track and extending at least part way therealong, the sheet material roll comprising:

flexible sheet material wound around a hollow roll core (116), the hollow roll core having first and second ends, characterised in that:

a first end cap (118) is positioned in the first end of the hollow roll core and extends outwardly therefrom, the first end cap including an inwardly-projecting portion (30, 32, 34) located inside the hollow roll core, and an outwardly-projecting portion (120) for guiding the sheet material roll in a respective guide track of the rolled product dispenser, said outwardly-projecting portion including at least one annular groove (126) located in its circumference cooperating with the guide projection to prevent insertion of an improperly oriented roll and to provide lateral guidance of the roll as it moves down along the guide tracks; and

a second end cap (119) is positioned in the second end of the hollow roll core and extends outwardly therefrom, the second end cap including an inwardly-projecting portion (30, 32, 34) located inside the hollow roll core, and an outwardly-projecting portion (121) for guiding the roll of sheet material in a respective guide track of the rolled product dispenser, and

the outwardly-projecting portion (120) of the first end cap (118) is smaller in diameter than the outwardly-projecting portion (121) of the second end cap (119)."

"6. A dispensing system for dispensing flexible material from sheet material rolls, the system comprising:

a rolled product dispenser (100), the dispenser including first and second opposing lateral side walls (104, 114), each lateral side wall having a guide track (110, 111), the guide track (110) of the first lateral side wall (104) having an elongated guide projection

(124) therein, the guide projection being positioned at the entrance of that guide track and extending at least part way therealong,; and

at least one sheet material roll (112) as claimed in claim 1;

wherein, when a sheet material roll is inserted into the dispenser, the guide tracks guide a respective outwardly-projecting cylindrical portion of the sheet material roll with the annular groove (126) cooperating with the elongated guide projection to prevent insertion of an improperly oriented roll and to provide lateral guidance of the roll as it moves down along the guide tracks, and the guide track of the second lateral side wall (114) guides the second outwardly-projecting portion (121)."

Claim 1 of the auxiliary request differs from claim 1 of the main request in that the feature *"and the inwardly-projecting portion (30, 32, 34) of the first end cap (118) includes a stop flange (36) projecting radially outwardly adjacent to both the inwardly-projecting portion and the outwardly-projecting portion (120) of the first end cap, the stop flange abutting the first end of the hollow roll core (116) when the inwardly-projecting portion of the first end cap is completely inserted into the hollow roll core thereby to locate said at least one annular groove (126) a predetermined distance from the first end of the hollow roll core"* is inserted at the end of the claim.

Claim 5 of the auxiliary request differs from claim 6 of the main request in that the comma after the word "therealong" is deleted and in that the expressions "one sheet material roll (112)" and "a sheet material

roll" are replaced by the expressions "one sheet material roll" and "a sheet material roll (112)", respectively.

V. The following documents were *inter alia* referred to in the appeal proceedings:

D2 US-A 4,671,466

D3 US-A 4,307,639

VI. The arguments of the appellant, in writing and during the oral proceedings, can be summarized as follows:

The feature "*the guide projection being positioned at the entrance of that guide track and extending at least part way therealong*" in claim 1 of the main request was not disclosed in the application as filed, since in the passage on page 7, lines 8 to 11, of the application as filed (published version) it was merely disclosed that the guide projection extended from the top to the bottom of the guide track, or just long enough to prevent the insertion of a roll with a non-keyed end cap. There was thus no basis in the application as filed to claim an extension of the guide projection somewhere in-between these two extremes, contrary to Article 123(2) EPC. Moreover, the expression "*at least part way*" was indeterminate and rendered claim 1 of the main request unclear, contrary to Article 84 EPC.

Document D2 represented the closest state of the art. This document disclosed (see Figure 6) a sheet material roll comprising a hollow core provided with end caps E, F having different diameters with a view to prevent

misorientation of the roll when loading the roll in a dispenser comprising channels 22, 24 having corresponding different diameters (see Figure 1, column 5, lines 24 to 30, and column 6, lines 3 to 13). Claim 1 of the main request differed from the sheet material roll known from document D1 in that the outwardly-projecting portion 120 of the first end cap 118 included "at least one annular groove (126) located in its circumference co-operating with the guide projection". The distinguishing feature merely solved the problem of increasing the lateral guidance of the roll in the guide track and the problem of ensuring that only properly "keyed" rolls are inserted into the keyed dispensers (the problem of preventing misorientation of the roll was already solved by providing end caps having different diameters). These two problems were solved by document D3. It was thus obvious to a person skilled in the art to apply the teaching of document D3, viz. to provide a groove 40 in one of the roll spindles co-operating with a flange 42 extending at least part way in the guide channel (see Figure 4, and column 5, line 61, to column 6, line 8, of document D3), to the roll known of document D2, and thus to arrive at the subject-matter of claim 1 of the main request.

The additional feature of claim 1 of the auxiliary request, viz. to provide a stop flange to the end cap for preventing that said end cap was inserted too far into the core 16, was a normal design option for the person skilled in the art for solving the problem posed.

VII. The respondent's arguments, in writing and during the oral proceedings, can be summarized as follows:

The guide strip 124 was illustrated in Figure 4 of the application as filed (published version) as extending from the top of guide track 110 to a position adjacent a roll in the reserve or storage position. In the passage on page 12, lines 8 to 4 from the bottom, of the application as filed (published version) it was clearly disclosed that "the guide strip may extend further downward along guide track 110". Claim 1 of the main request thus met the requirements of Articles 123(2) and 84 EPC.

Document D2 could be regarded as the closest prior art. This document disclosed (see Figure 6) a roll comprising a hollow core provided with end caps E, F having different diameters (henceforth referred to as the first non-alignment strategy, which was already known from US-A 3,437,388 and cited in column 5, lines 37 to 40, of document D2) to assure proper orientation of the roll in a dispenser. Document D2 did not disclose the second non-alignment strategy disclosed in document D3, namely to provide a groove in one of the end caps and a corresponding guide projection in the guide track of the dispenser (so called "keying"). Keying made it more difficult for a custodian to insert an improperly oriented roll, limited undesirable lateral motion of rolls and opened the possibility to provide sheet material rolls in different grades that only fitted in predetermined dispensers. Document D3 did not disclose the first non-alignment strategy. Documents D2 and D3 provided alternative ways of preventing misorientation of a roll. The person skilled



in the art would either provide rolls having outwardly-projecting portions of different width (see e.g. column 5, lines 24 to 40, of document D2), or providing one of the guide tracks with flange means (see e.g. claim 5 of document D3), but not both. Moreover, the flange disclosed in document D3 extended only at the top of the guide track ("channel 26") for assuring proper loading of the roll in the dispenser (see column 5, line 61, to column 6, line 8; Figure 2 of document D3 was incorrect in this respect). It did therefore not extend "at least part way" along the guide track and its purpose was not "to provide lateral guidance of the roll as it moves down along the guide tracks", as required by claim 1 of the main request. Extending the flange known from document D3 further down the guide track would run counter to the objective expressed in column 2, lines 29 to 35, namely to provide guide tracks that promote rotation of the rolls. Consequently, a combination of documents D2 and D3 would not have led the person skilled in the art to the invention.

Claim 1 of the auxiliary request was further restricted to a sheet material roll with a first end cap having a stop flange 36 (see Figure 2 of the patent in suit), which functioned as an alignment device that assured the proper predetermined spacing of groove 126 from the edge of the roll so that it aligned with the guide projection 124. This feature nor its alignment function was known from, or rendered obvious by the prior art. The subject-matter of claim 1 of the auxiliary request therefore involved an inventive step.

## Reasons for the Decision

Main request

### 1. *Admissibility of the amendments*

1.1 Claim 1 of the main request differs from claim 1 as granted in that the following features have been added:

(i) the guide projection being positioned at the entrance of that guide track and extending at least part way therealong,

(ii) to prevent insertion of an improperly oriented roll and to provide lateral guidance of the roll as it moves down along the guide tracks.

A basis for feature (i) is the passage on page 7, lines 8 to 11, in combination with the passage on page 12, lines 8 to 4 from the bottom, of the application as filed (published version). A basis for feature (ii) is the passage on page 6, lines 4 to 2 from the bottom, in combination with the passage on page 8, lines 11 to 13, of the application as filed (published version).

Claim 1 of the main request thus meets the requirements of Article 123(2) EPC. Since no features present in claim 1 as granted have been deleted, the requirements of Article 123(3) EPC are also met.

1.2 Claim 1 of the main request relates to "A sheet material roll (112) for use in a rolled product dispenser (100) ...". It is established case law of the Boards of Appeal of the European Patent Office that the

expression "for use in ..." must be construed as "suitable for use in ...". For the purpose of examining whether the requirements of Articles 84, 54 and 56 EPC are fulfilled, in the present case (functional) features of claim 1 pertaining to the product dispenser rather than to the sheet material roll do not need to be considered, if these features (i) do not imply corresponding features of the sheet material roll going beyond the features already claimed in claim 1 pertaining to sheet material roll itself and (ii) do not affect the suitability of the sheet material roll for use in the claimed rolled product dispenser. For example, the position and length of the guide projection in the guide track of the dispenser is only relevant in so far as the annular groove 126 located in the circumference of the first end cap of the sheet material roll is able to co-operate with said guide projection.

In the judgement of the Board, the features of claim 1 of the main request defining a sheet material roll for use in a rolled product dispenser (as claimed) are clear, Article 84.

2. *Objection of lack of inventive step, Article 56 EPC*

2.1 Document D2, which is cited in paragraph [0027] of the patent in suit, represents the closest prior art. This document discloses a sheet material roll R, D for use in a rolled product dispenser 10 (see Figures 1 to 3, and column 4, line 65, to column 5, line 15) similar to sheet material roll of claim 1 of the main request, but without the keyed features including the guide projection strip and the groove.

The subject-matter of claim 1 of the main request differs from the sheet material roll known from document D2 in that the sheet material roll is suitable *"for use in a rolled product dispenser (100) having ... a guide projection (124) in one of the guide tracks"* and in that the outwardly-projecting portion 120 of the first end cap 118 having the smallest diameter includes *"at least one annular groove (126) located in its circumference co-operating with the guide projection"*.

- 2.2 The distinguishing features of claim 1 of the main request with respect to document D2 solve the problem of further enhancing prevention of misorienting a roll when loading the roll in a dispenser (if eg the outwardly-projecting portion 120 of the first end cap 118 is only slightly smaller in diameter than the outwardly-projecting portion 121 of the second end cap 119, cf. the last feature of the claim) and solves the problem of increasing the lateral guidance of the roll in the guide track when loading the roll in a dispenser.
- 2.3 Document D3 discloses a dispensing system for dispensing flexible material from sheet material rolls whereby an annular groove 40 located in the circumference of an outwardly-projecting portion (spindle 38) of a roll (mandrel 30) cooperates with guide projections (flanges 42) extending along the inner edges of the guide track (channel 26) when the roll R is inserted into the multiple roll dispenser. The flange 42 shown in Figures 3 and 4 prevents the insertion of a roll with a non-keyed end cap (see column 5, line 66 to column 6, line 8, of document D3). The length of the flange 42 shown in Figures 3 and 4

that extends in the vertical direction of channel 26 is slightly greater than necessary to prevent the insertion of a roll with a non-keyed end cap and thus provides lateral guidance of the roll as it moves down along the guide tracks.

The distinguishing features of claim 1 of the main request with respect to document D2 are thus largely known from document D3, and solve to a large extent the problems mentioned in point 2.2 above.

- 2.4 In the judgement of the Board, it was obvious to the person skilled in the art, starting from document D2, and seeking to provide a sheet material roll for use in a rolled product dispenser which (further) minimizes the possibility of improperly oriented rolls from being inserted, to include at least one annular groove in the circumference of the end cap smallest in diameter of the hollow roll core, and a corresponding guide projection in the guide track of the dispenser (cf. document D3) and thus to arrive at the subject-matter of claim 1.

It follows that the subject-matter of claim 1 of the main request does not involve an inventive step, Article 56 EPC.

Auxiliary request

### 3. *Admissibility of the amendments*

Claim 1 of the auxiliary request meets the requirements of Articles 84 and 123 EPC. Since this was not

contested by the appellant, there is no need for further substantiation of this matter.

4. *Objection of lack of inventive step, Article 56 EPC*

The additional feature of claim 1 of the auxiliary request concerns a stop flange to the first end cap which cap is positioned in one end of (inside) the hollow roll core.

Hollow roll cores around which flexible sheet material such as toilet paper is wound are typically cylindrical. Document D3 discloses an embodiment of a sheet material roll, whereby the core C of a paper roll carries a mandrel 30 frictionally held within the core. In order to fix the outwardly projecting spindles 36, 38 formed on a mandrel 30 in the roll core it is known from document D3 to provide keying means (fins 34) and a flange 32 extending outwardly from the cylindrical surface of the mandrel 30 at one end thereof (see Figure 4, and column 5, lines 49 to 57). Document D3 further teaches that the spindles may also be provided in the form of core end caps, see column 2, lines 29 to 35.

In the judgement of the Board, the person skilled in the art would immediately realize that a similar flange as the flange of the mandrel described above would prevent axial movement of a cylindrical end cap in a cylindrical hollow roll core.

Consequently, the subject-matter of claim 1 of the auxiliary request does not involve an inventive step, Article 56 EPC.

**Order**

**For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber